```
imax_assoc  THM

⊢  ∀a,b,c:ℤ. imax(a;imax(b;c)) = imax(imax(a;b);c)  by Auto
|
1. a : ℤ
2. b : ℤ
3. c : ℤ
⊢  imax(a;imax(b;c)) = imax(imax(a;b);c)
| by Decide: a≤b | b≤c THEN 2 Times (ElimImaxmin Auto 0)
|
|\
| 4. a≤b
| 5. b≤c
| ⊢  c = c  by Trivial
|
|\
| 4. a≤b
| 5. ¬b≤c
| ⊢  b = b  by Trivial
|
|\
| 4. ¬a≤b
| 5. b≤c
| ⊢  imax(a;c) = imax(a;c)  by Auto
|
.\
. 4. ¬a≤b
. 5. ¬b≤c
. ⊢  a = a  by Trivial
END
```